# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/586,641 | 06/05/2000 | HIROKATSU SHIMADA | 15162/02070 | 7764 |

24367 7590 08/24/2005

SIDLEY AUSTIN BROWN & WOOD LLP
717 NORTH HARWOOD
SUITE 3400
DALLAS, TX 75201

| EXAMINER | |
|---|---|
| PHAM, THIERRY L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2624 | |

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/586,641 | SHIMADA, HIROKATSU | |
| | Examiner | Art Unit | |
| | Thierry L. Pham | 2624 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *06 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 6/6/05.
- Claims 1-27 are pending in application; wherein claims 21-27 are newly added.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-8, 10-13, 15-18, 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub et al (U.S. 6552813), and in view of Ito et al (U.S. 5982983).

Regarding claim 1, Yacoub discloses a printer control device (server, Fig. 3 & 4) which controls multiple printers (Fig. 4) connected to a network circuit, said printer control device comprising:

- a detector (a detecting means is incorporated within a server, col. 4, lines 28-52) for detecting a problem in any of the printers;
- a selection controller (server, Fig. 3, col. 4, lines 5-67 and col. 5, lines 1-12) for selecting, when a problem is detected by the detector, another normally functioning printer to substitute (substitute printer, abstract and col. 4, lines 28-67) for the printer in which the problem is detected by said detector; and
- a substitute controller for selecting the substitute printer for the failed selected printer to ensure same image quality (finding substitute printer for failed printer, col. 4, lines 5-67 and col. 5, lines 1-12).

However, Yacoub fails to explicitly teach and/or suggest a substitution controller for correcting print data, that was to have been printed out by the printer in which the problem is detected by said detector, based on a color information of the printer in which the problem is detected by the detector and a color information of the selected substitute printer, and for outputting the corrected print data to the selected substitute printer.

Ito, in the same field of printing system, teaches a substitution controller (i.e. controller A, fig. 1) for correcting print data (controller A for correcting the print data based upon the characteristics of the output device (i.e. printer B of fig. 1), col. 2, lines 5-63 and col. 4, lines 18-40, and col. 7, lines 60-67), that was to have been printed out by the printer in which the problem is detected by said detector, based on a color information of the printer in which the problem is detected by the detector and a color information of the selected substitute printer (characteristics of output device including color information, col. 2, lines 5-63 and col. 4, lines 18-40, and col. 7, lines 60-67), and for outputting the corrected print data to the selected substitute printer (i.e. printer B, fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Yacoub as per teachings of Ito to include a substitute controller for correcting print data based upon an output device's characteristics because of a following reason: (•) to ensure high quality visible images (Ito, col. 1, lines 15-20); (•) maintain constant high quality regardless of the differences among the various kinds of printer (Ito, col. 2, lines 45-50 and col. 8, lines 1-17).

Therefore, it would have been obvious to combine Yacoub with Ito to obtain the invention as specified in claim 1.

Regarding claim 2, Ito further discloses a printer control device as claimed in claim 1, wherein the print data include color print data that indicate a color image (color, col. 2, lines 5-65), and said substitution controller performs correction (data (controller A for correcting the print data based upon the characteristics of the output device (i.e. printer B of fig. 1), col. 2, lines 5-63 and col. 4, lines 18-40, and col. 7, lines 60-67), so that a color characteristic of the color image printed by the printer in which the problem is detected are the same as that of the color image printed by the selected substitute printer.

Regarding claim 3, Ito further discloses a printer control device as claimed in claim 1, wherein the print data include middletone print data that indicate a middletone image, and the substitution controller performs correction so that a gradation characteristic (gradation characteristics, col. 2, lines 25-28) of the middletone image printed by the printer in which the

problem is detected are the same as the gradation characteristic of the middletone image printed by the selected substitute printer.

Regarding claim 5, Yacoub further discloses a printer control device as claimed in claim 1, wherein said multiple printers include a copying machine (fig. 2), and multifunction printer includes a copying function is known in the art and widely available.

Regarding claim 21, Ito further teaches a printer control device as claimed in claim 1, wherein image quality includes at least one of a color characteristic and gradation characteristic (gradation characteristic, col. 2, lines 33-36 and col. 3, lines 60-62).

Regarding claims 6-8, 10, and 22: Claims 6-8, 10, and 22 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 1-3, 5, and 21 (respectively) above; therefore, claims 6-8, 10, and 22 are rejected for the same rejection rationale/basis as described in claims 1-3, 5, and 21 (respectively) above.

Regarding claims 11-13, 15, and 23: Claims 11-13, 15, and 23 recite limitations that are similar and in the same scope of invention as to those in claims 1-3, 5, and 21 (respectively) except computer readable memory for storing computer programs. All computers/printers have some type of computer readable medium (i.e. ROM, Ito, fig. 1) for storing computer programs, hence claims 11-13, 15 would be rejected using the same rationale as in claims 1-3, 5, and 21 (respectively).

Regarding claims 16-18, 20, and 24: Claims 16-18, 20, and 24 recite limitations (i.e. system) that are similar and in the same scope of invention as to those in claims 1-3, 5, and 21 (respectively); therefore, claims 16-18, 20, and 24 are rejected for the same rejection rationale/basis as described in claims 1-3, 5, and 21 (respectively) above. A system includes a host computer and a printer is shown in fig. 1 of Ito.

Regarding claims 25-27: Claims 25-27 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 1 & 21 (respectively) above; therefore, claims 25-27 are rejected for the same rejection rationale/basis as described in claims 1 & 21 (respectively) above.

Claims 4, 9, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub as applied to claim 1 above, and in view of Hirofumi et al (JP 410301737A).

Regarding claim 4, the combinations of Yacoub and Ito do not disclose explicitly wherein said substitution controller outputs to the selected substitute printer the print data for remaining pages not printed by the printer in which the problem is detected.

Hirofumi, in the same field of endeavor for detecting failure printers in the network, discloses substitution controller outputs to the selected substitute printer the print data for remaining pages (abstract and computer-translation, p.3, paragraph 14) not printed by the printer in which the problem is detected.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Yacoub and Ito as per teachings of Hirofumi (print remaining pages) because of a following reason: to increase printing capability and to eliminate the waiting time when errors occurred within the networked printers (Yacoub, col. 3, lines 23-47 and col. 10, lines 50-65).

Therefore, it would have been obvious to combine Hirofumi with Yacoub to obtain the invention as specified in claim 4.

Regarding claim 9: Claim 9 is the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claim 4; therefore, claim 9 rejected for the same rejection rationale/basis as described in claim 4 above.

Regarding claim 14: Claim 14 recites limitations that are similar and in the same scope of invention as to those in claim 4 except computer readable memory for storing computer programs. All computers/printers have some type of computer readable medium (i.e. ROM, Ito,

fig. 1) for storing computer programs, hence claim 14 would be rejected using the same rationale as in claim 4.

Regarding claim 19: Claim 19 recites limitations (i.e. system) that are similar and in the same scope of invention as to those in claim 4 therefore, claim 19 is rejected for the same rejection rationale/basis as described in claim 4 above. A system includes a host computer and a printer is shown in fig. 1 of Ito.

***Response to Arguments***

• Applicant's arguments, see page 9, filed on 6/6/05, with respect to claims 1-20 have been fully considered and are persuasive. The rejection (35 U.S.C. 112, second paragraph) of claims 1-20 has been withdrawn.

• Applicant's arguments filed pages 9-11 have been fully considered but they are not persuasive.

Regarding claim 1, the applicant argued the cited prior arts of record (U.S. 6552813 to Yacoub et al) and (U.S. 5982983 to Ito et al) fail to teach and/or suggest substitution controller for correcting print data based on color information of the printer with a problem and the substitute printer. In other words, combinations of Yacoub and Ito fail to teach and/or suggest correcting print data based on ***both*** the color information of the printer with a problem and the color information of the selected substitute printer.

In response, the examiner disagrees with applicant's assertion/arguments. Ito teaches a substitution controller (i.e. controller A, fig. 1) for correcting print data (controller A for correcting the print data based upon the characteristics of the output device (i.e. printer B of fig. 1), col. 2, lines 5-63 and col. 4, lines 18-40, and col. 7, lines 60-67), that was to have been printed out by the printer in which the problem is detected by said detector, based on a color information of the printer in which the problem is detected by the detector and a color information of the selected substitute printer (characteristics of output device including color information, col. 2, lines 5-63 and col. 4, lines 18-40, and col. 7, lines 60-67), and for outputting the corrected print data to the selected substitute printer (i.e. printer B, fig. 1). Ito teaches

"information about recording characteristics which are different for respective printers is output to an external apparatus, e.g., host computer, a controller, or the like, as a recording characteristics signal, and the external apparatus makes a suitable correction, corresponding to the respective recording characteristics to image data for each of the printers in response to the respective recording characteristic signals, and supplies suitable corrected image signals to the recording apparatus. As a result, the external apparatus is able to maintain output images in constant high quality regardless of the differences among the various kinds of printers", col. 2, lines 36-50. Please also see col. 3, lines 1-17 for additional motivation for doing so. Clearly, Ito teaches correcting print data based upon differences of various printers.

Regarding claim 2, the applicants argued the cited prior art of record (U.S. 5982983 to Ito et al) fails to teach and/or suggest "correcting color print data".

In response, obviously, it is known in the art that image data as taught by Ito includes both monochrome and color image data. In addition, "correcting color print data" is also known in the art and widely available. Please refer to additional pertinent arts as cited in the Conclusion section for teachings of "correcting color print data".

## *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Closely consideration of these prior art references is recommended.

- U.S. 5835243 to Mori, teaches an apparatus/method for correcting print data including color conversion based upon characteristics (i.e. color information) of the output device (printers).
- U.S. 6404509 to Kuwata et al, teaches an apparatus/method for correcting print data including color conversion based upon characteristics (i.e. color information) of the output device (printers).

• U.S. 6473197 to Shimazaki, teaches an apparatus/method for correcting print data including color conversion based upon characteristics (i.e. color information) of the output device (printers).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

GABRIEL GARCIA
PRIMARY EXAMINER